In Part II. the recent advances in the manufacture of steel have been given special attention, including the properties of vanadium steel, manganese steel, and high-speed steel. Re-enforced concrete has also received a more adequate treatment, and the chapter on this subject has been thoroughly revised and modernized. The chapter on timber has also received an equally thorough revision, and considerable material on preservative processes has been added.

Riverside Educational Monographs. Edited by HENRY SUZZALLO. Boston: Houghton Mifflin Company. 35 cents each.

Individuality. By E. L. THORNDIKE.

Few teachers recognize sufficiently the importance of individuality in their work. The tendency is to bring all the members of a class to a common level, not only the same level of attainment, but to the same mental types and qualities. The author in this little volume points out the various individual differences and the causes which influence them.

Teachers who read it will find much of interest and profit and will have a truer conception of what they should accomplish.

Education for Efficiency and the New Definition of the Cultivated Man. By CHARLES W. ELIOT.

These two addresses treat the same subject from two different points of view—culture and efficiency—and should do much to give teachers a better conception of standards and ideals in education. Dr. Eliot's long experience in educational work and his standing among teachers will insure for this book a wide hearing. There is much sound judgment and wisdom condensed here in small space.

The Teacher's Philosophy in and out of School. By WILLIAM DEWITT HYDE.

Much has been said during the immediate past concerning the teacher's knowledge of subject matter and of his better understanding of the child and social life. While no one will deny the importance of these considerations it seems possible that in giving them emphasis the teacher has been almost forgotten. His individuality, his culture, and his efficiency have too often been neutralized by prescribed conditions and at the present time there is great need of a philosophy of teaching, a philosophy which takes into consideration "the teaching personality and the teaching life." Such a philosophy President Hyde gives in this volume—one which every teacher will do well to read and ponder.

How to Study and Teaching How to Study. By F. M. McMURRY. Boston: Houghton Mifflin Company. Pp. 324. $1.25.

Professor McMurry has in this volume given a rather careful exposition of the nature of study and its principal factors, and their relation to children. In as many chapters he treats of the following eight factors in study: Provision for Specific Purposes, The Supplementing of Thought, The Organization of Ideas, Judging of the Soundness and

General Worth of Statements, Memorizing, The Using of Ideas, Provision for a Tentative rather than a Fixed Attitude towards Knowledge, Provision for Individuality.

There is perhaps no one point in school work so neglected as that of learning how to study. Every one is left to stumble into methods and habits of his own, which for the most part is conducive to anything but economy of time and efficiency of effort. The author has done a good service in giving this discussion.

Elementary Trigonometry. By F. T. SWANWICK. Cambridge: The University Press. Pp. 258. $1.25 net.

The first chapter of this book, which is on Approximate Arithmetic, is rather an innovation from the American standpoint. Such work if complete enough is of value and should be taken up somewhere, but an algebra would seem to be the more natural place to look for it.

The author defines: "The sine of an obtuse angle is equal to the sine of the supplementary acute angle." "The cosine of an obtuse angle is equal to the cosine of the supplementary acute angle." By means of these he has simple means of proving the formula for $(A \pm B)$ even when A and B are obtuse.

The book on the whole seems to have been carefully written and presents many excellent features.

Plane Geometry. By C. A. HART and D. D. FELDMAN. New York: American Book Company. Pp. 311. 80 cents.

This is a geometry of the usual type, as far as its general makeup is concerned, but it is well arranged typographically and contains some excellent features, for example, a very complete summary of the formulas of plane geometry.

It conforms to modern usage in its choice of propositions, and seems to have a very full set of well chosen exercises. There are also included some interesting references to important historical material.

One unusual feature is the definition of a plane figure as including both the boundary and the portion of the plane inclosed.

The Twenty-Seven Lines upon a Cubic Surface. By ARCHIBALD HENDERSON. Cambridge: The University Press. Pp. 100. $1.50 net.

The fact of a definite number of straight lines lying on the cubic surface seems to have been discovered by Cayley in 1849, while Salmon determined the number as twenty-seven. In 1869 Wiener constructed a model of the surface with the twenty-seven real lines lying on it. In this memoir the author gives "a general survey of the problem of the twenty-seven lines, from the geometric standpoint, with special attention to salient features: the concept of trihedral pairs, the configuration of the double six, the solution of the problem of constructing models of the double six configuration and of the configurations of the straight lines upon the twenty-one types of cubic surfaces, the derivation of the Pascalian configuration from that of the lines upon the cubical surface with one conical point, and certain allied problems."